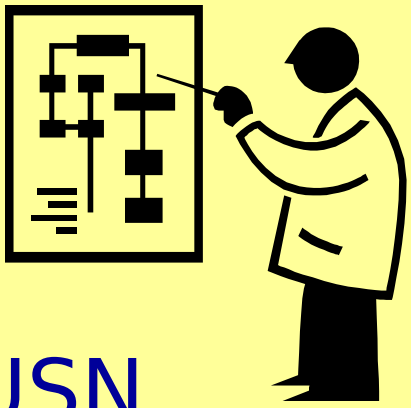
QUALITY MANAGEMENT

for the

Clinical Epidemiologist



CAPT W. Z. McBride, MC, USN

NHEC Workshop

20 March 2004

Virginia Beach

Objectives

- *Participants will be able to:*
  - Define Quality Management
  - Discuss key points in the history of Quality management in health care, in both the United States and the Navy
  - Discuss various quality systems and tools
  - Describe performance improvement concepts
  - Demonstrate understanding of the application of quality management principles

Definition

- Quality Management is the…

  Coordination of efforts to meet or exceed customer satisfaction through continuous collection of performance measures and directed process improvements.

Florence Nightingale in the 1860s and the Crimean War

- Pioneer of nursing and a reformer of hospital sanitation methods
- Urged hospitals and doctors to report surgical outcomes in a standardized manner
- Polar-Area Diagram: plot of the incidence of preventable deaths in the military

Polar-Area Diagram

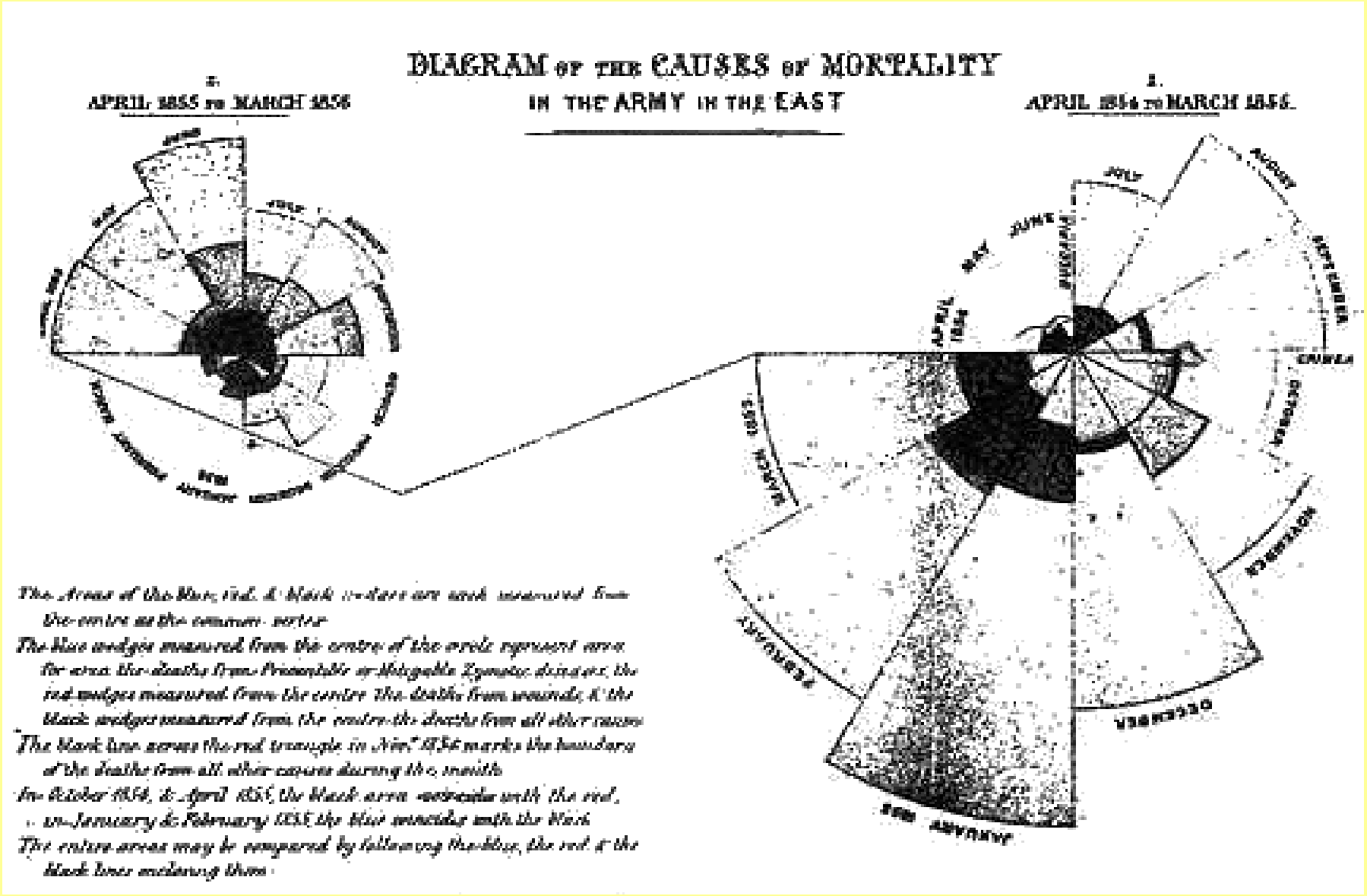


DIAGRAM OF THE CAUSES OF MORTALITY
IN THE ARMY IN THE EAST
APRIL 1855 TO MARCH 1856
APRIL 1854 TO MARCH 1855
APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER
JANUARY
FEBRUARY
MARCH
1ST WINTER
2ND WINTER
1ST SPRING
2ND SPRING
1ST SUMMER
2ND SUMMER
AUTUMN
CRIMEA
The Areas of the Blue, Red, & Black wedges are each measured from the centre as the common vertex
The Blue wedges measured from the centre of the circle represent area for area, the deaths from Preventible or Mitigable Zymotic diseases, the red wedges measured from the centre the deaths from wounds, & the black wedges measured from the centre the deaths from all other causes
The black line across the red triangle in Nov.r 1854 marks the boundary of the deaths from all other causes during the month
In October 1854, & April 1855, the black area coincides with the red,
in January & February 1855 the blue coincides with the black
The entire areas may be compared by following the blue, the red & the black lines enclosing them

Ernest Codman
Early Efforts in Quality Assurance

- Ether Charts
- End Results Idea
- Classification method for errors and adverse outcomes
- “A Study of Hospital Efficiency”
- Bone Sarcoma Registry

End Result Idea

“The End Result Idea may not achieve fulfillment for several generations…but I am able to enjoy the hypothesis that I may receive some {honors} from a more receptive generation”

- Ernest Codman

Hospital Standardization Program of 1918

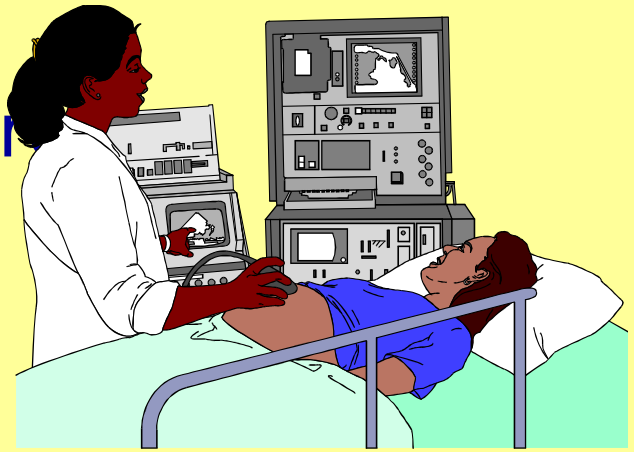
- The First Quality Assurance Management System for Hospitals
- Five-point Minimum Standard
  - Organized medical staff
  - Credentialing
  - Peer review
  - Medical Records
  - Facilities requirements

Joint Commission on Accreditation of Hospitals (JCAH) 1951

- Took over the American College of Surgeon's (ACS) Hospital Standardization Program

Healthcare Quality Management in the 1970s

- Improved medical technology
- Advances in computer technology and data processing
- Healthcare costs start to skyrocket
- Easier to “assure” healthcar quality because of data processing



Healthcare Quality Management in the 1980s

- Total Quality Management
- Malcolm Baldrige National Quality Award
- Joint Commission on Accreditation of Health Care Organizations

Healthcare Quality Management in the 1990s

- Total Quality Management Expands in Healthcare
- Malcolm Baldrige National Quality Award Offered to Healthcare
- ISO 9000 in Healthcare

IOM's Report on Medical Errors 1999

- According to the Institute of Medicine, as many as 98,000 people die each year due to medical errors

Historical Highlights within the Navy

- **1983**: Navy conducts feasibility of applying “Japanese management techniques” to Navy organizations
- **1984**: Demonstration project at Naval Air Depot, North Island, CA
- **1985**: “Total Quality Management” coined by NPRDC (Naval Personnel Research and Development Command)
- **1986**: DoD endorses TQM concept
- **1988**: BUMEDINST 6010.13, Quality Assurance Instruction signed

(cont.)

BUMEDINST 6010.13
Quality Assurance (QA) Program

Excerpt:

5. Policy. All active duty (ACDU), Reserve, and civilian medical and dental personnel must participate in ongoing monitoring and evaluation of processes designed to assess the quality and appropriateness of the services they provide.

Historical Highlights within the Navy (cont.)

- **1989:** One-day seminar on TQM conducted at Navy Medicine Flag Officer Conference
- **1989**: Two-day seminar on Continuous Quality Improvement conducted by Dr. Donald Berwick for Navy Medicine Commanding Officers
- **1990**: Naval Medical Quality Institute established
- **1992**: Navy Medical Department's "Journey to Excellence" published
- **1992**: CNET announces 5 courses available in Quality Management
- **1992**: TQL implemented by DoN

(cont.)

Historical Highlights within the Navy (cont.)

- **1993**: **Principle-Centered Leadership** and **7 Habits** courses offered
- **1997**: “Quality” paragraph added to BUMEDINST 6320.66B (Credentialing and Privileging instruction)
- **1997**: MED-38 sent a Baldrige-based self-assessment guide out to the field
- **1999**: “Quality” duties placed in BUMEDINST 6010.17B (Medical Staff Bylaws instruction)
- **2001**: Surgeon General SITREP 13 July 2001
- **2003**: NMETC obtained ISO 9000 certification

BUMEDINST 6320.66D

Credentials Review and Privileging Program

Excerpt…

3. Quality

a. A Navy Medical Department quality goal is “best value” in health care. Best value is defined as the highest quality of health care services delivered in a timely and economical manner. We will achieve best value through ***implementation of best clinical business practices***. (emphasis added)

(cont.)

Excerpt from BUMEDINST 6320.66D (cont.)

3. Quality (cont.)

   b. Each element of best value is a ***result or outcome that must be measured and documented*** to quantify our performance and assess the effectiveness of improvement activities. Achieving best value demonstrates the Navy Medical Department is a competitive member of the health care industry and thus becomes invaluable to our patients, other customers, and stakeholders. (emphasis added)

Historical Highlights within the Navy (cont.)

- **1993**: **Principle-Centered Leadership** and **7 Habits** courses offered
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From the Surgeon General…

Former Navy Surgeon General VADM Richard Nelson

Adapted from SITREP 13 July 2001

The health care system of the 21st century will have the characteristics of other high-performing organizations:

- Measuring performance along a variety of dimensions
- Monitoring outcomes of care
- Using information to change or redesign
- Continuous improvement
- Using advanced engineering principles
- Promoting innovation and quality improvement.

Evolution of Approaches to Quality Assessment

IMPLICIT REVIEW
(Morbidity and Mortality Review)

TIME-LIMITED STUDIES
(Retrospective Audits)

ONGOING MONITORING AND EVALUATION
(Quality Assurance)

INTEGRATED PROGRAM OF CONTINUAL IMPROVEMENT
(Continuous Quality Improvement)

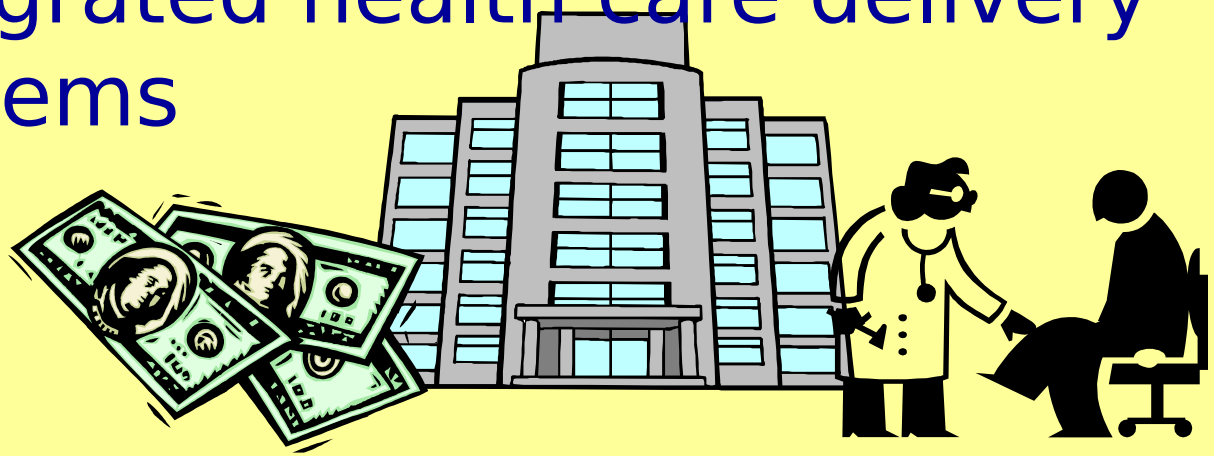
Adapted from JCAHO, 1991

Drivers of Quality Improvement within Health Care

- Escalating cost of health care
- Growing share of Gross Domestic Product
- Aging of population
- Elderly high consumers of health care
- Increasing supply of providers
- Cost of new technology and pharmaceuticals

Drivers of Quality Improvement (cont.)

- Employers cost of health care benefits
- Demand for quality measurement
- Needs of consumers vs. providers
- Evolution from cottage industry to integrated health care delivery systems



Quality Improvement

- The mandates come from
  - JCAHO (see DoD Directive 6025.13, dtd 1995)
  - Centers for Medicare and Medicaid Services: Conditions of Participation
  - CMS Scope of Work for QIOs
  - AHA “voluntary” quality initiative
  - State legislatures
  - Industry
  - Employers and labor unions

Quality Advocates

Quality Systems

- ISO 9000
- Baldrige
- JCAHO
- Six Sigma
- Kaizen
- Hoshin Kanri

ISO 9000

- Not a acronym
- ISO = “same”
- International Organization for Standardization
- Founded in 1947

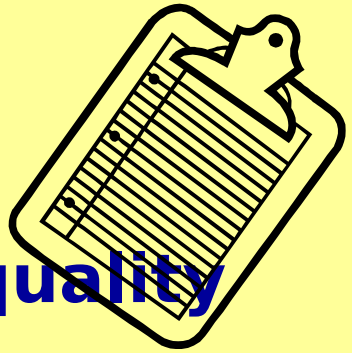
International Organization for Standardization (ISO)

- World’s largest developer of standards
- More than 14,000 International Standards for business, government and society
- A network of national standards institutes from 148 countries
- Partnership with international organizations, governments, industry, business and consumers
- A bridge between public and private sectors

ISO (cont.)

- ISO standards contribute to the more efficient and safer development, manufacturing and supply of products and services
- Promote and facilitate fair trade between countries
- Provide governments with a technical base for health, safety and environmental legislation
- Aid in technology transfer to developing countries
- ISO standards serve to safeguard consumers of products and services

ISO Standards



- ISO 9000 is concerned with **quality management**
  - *What the organization does to enhance customer satisfaction by meeting customer and applicable regulatory requirements and continually to improve its performance*
- ISO 14000 is primarily concerned with **environmental management**
  - *What the organization does to minimize harmful effects on the environment caused by its activities, and continually to improve its environmental performance*

ISO 9001 and 9004 Standards

Based on eight principles that reflect best quality management practices.

1. Customer focus
2. Leadership
3. Involvement of people
4. Process approach
5. System approach to management
6. Continual improvement
7. Factual approach to decision making
8. Mutually beneficial supplier relationships

Malcolm Baldrige National Quality Award

- Created by Public Law 100-107
- Established in 1988
- Administered by the Baldrige National Quality Program (BNQP)
- Named for Malcolm Baldrige, who served as Secretary of Commerce from 1981 – 1987; a proponent of quality management, whose managerial excellence contributed to long-term improvement in efficie effectiveness of government

Baldrige National Quality Program (BNQP)

- BNQP is a customer-focused federal change agent
- Enhances competitiveness, quality, and productivity of U.S. organizations
- Managed by U.S. Commerce Department's National Institute of Standards and Technology (NIST), in close cooperation with the private sector

Baldrige Award

- Given to recognize U.S. organizations for their achievements in quality and performance
- Raise awareness of the importance of quality and performance excellence as a competitive edge
- The result of a public-private partnership
- American Society for Quality assists in administering the award program
- Costs are met by application fees a
  industry donations

Baldrige Award (cont.)

- The intent of the Award is to promote:
  - An awareness of quality as an increasingly important element in competitiveness
  - Understanding of the requirements for performance excellence
  - Sharing of information on successful performance strategies, and the benefits derived from implementation of these strategies.

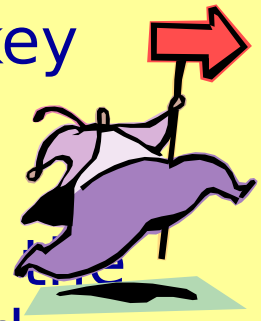
Baldrige Award (cont.)

- Awards are given for business excellence and quality achievement
- Up to two awards are given annually in each of three categories:
  - Business
  - Education
  - Health Care

- Award recipients include: Motorola, Xerox, Federal Express, Ritz-Carlton Hotels, University of Wisconsin-Stout, Baptist Hospital (Pensacola)

Award Criteria Categories

1. **Leadership**: how senior executives guide the organization and how the organization addresses its responsibilities to the public and practices good citizenship
2. **Strategic planning**: how the organization sets strategic directions and determines key action plans
3. **Customer and market focus**: how the organization determines requirements and expectations of customers and markets and builds lasting relationships with customers



(cont.)

Award Criteria Categories (cont.)

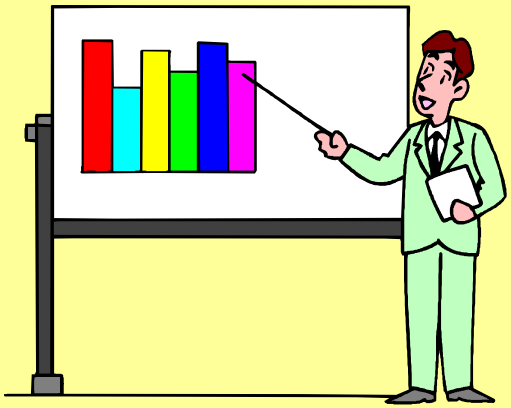
4. **Measurement, analysis, and knowledge management**: how the management, effective use, analysis, and improvement of data and information support key organization processes

5. **Human resource focus**: how the workforce is enabled to develop its full potential align with the organization's objectives

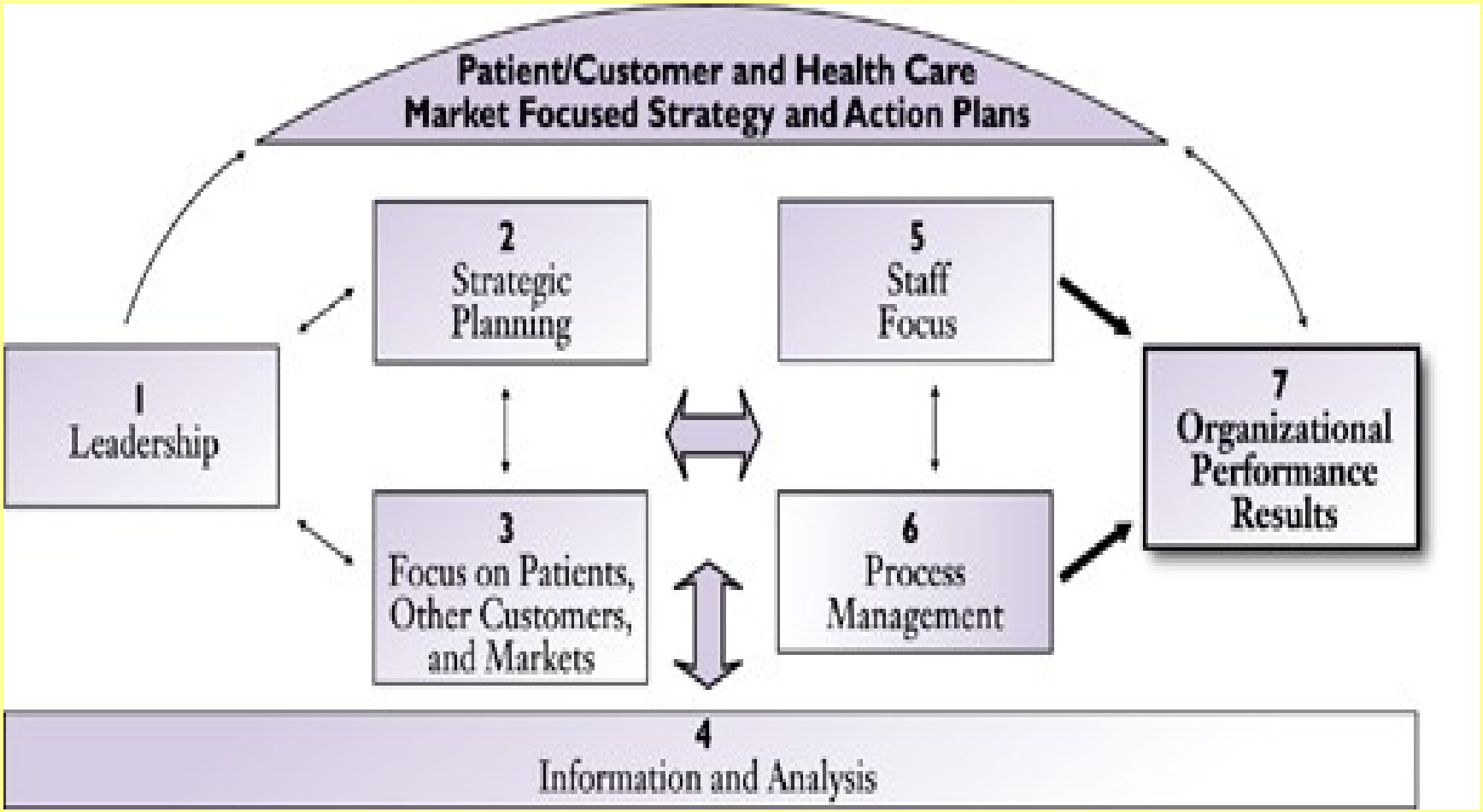
(cont.)

Award Criteria Categories (cont.)

6. **Process management**: how key production/delivery and support processes are designed, managed, and improved
7. **Business results**: examines performance and improvement in key business areas:
   - Customer satisfaction
   - Financial and marketplace performance
   - Human resources
   - Supplier and partner performance
   - Operational performance
   - Governance and social responsibility



Baldridge Model



Joint Commission on Accreditation of Healthcare Organizations (JCAHO)

- An independent, not-for-profit organization, established in 1951
- Governed by a board that includes physicians, nurses, and consumers
- Sets the standards by which health care quality is measured in America and around the world
- Evaluates the quality and safety of care for more than 16,000 health care organizations

Mission of JCAHO

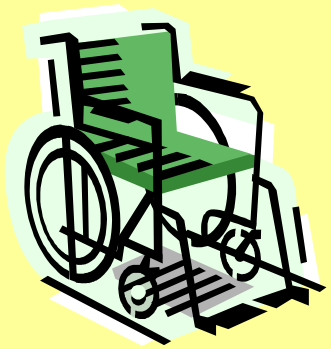
To continuously improve the safety and quality of care provided to the public through the provision of health care accreditation and related services that support performance improvement in health care organizations.

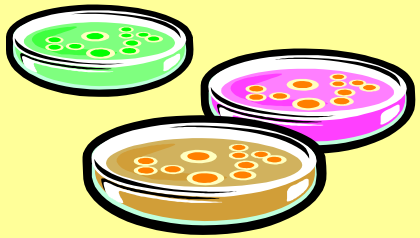
JCAHO Accreditation

- To maintain and earn accreditation, organizations undergo an extensive on-site review by a team of JCAHO health care professionals, at least every three years.
- The purpose of the review is to evaluate organizational performance in areas that affect health care.
- Accreditation is awarded based on how well organizations meet JCAHO standards.

Accreditation Programs

- Ambulatory Care
- Assisted Living
- Behavioral Health
- Home Care
- Hospital
- Laboratory
- Long-term Care
- Managed Care
- Office-based Surgery
- Subacute Care





Six Sigma

- A business philosophy using data and statistical analysis to focus on continuous improvement by:
  - Understanding customers' needs
  - Analyzing key processes
  - Instituting performance measurement methods
  - Identifying and eliminating "defects" in manufacturing and service-related processes

Six Sigma (cont.)

- Commonly defined as 3.4 defects per million opportunities (99.9997% defect free)
- Defined and understood at three distinct levels:
  - Metric
  - Methodology
  - Philosophy

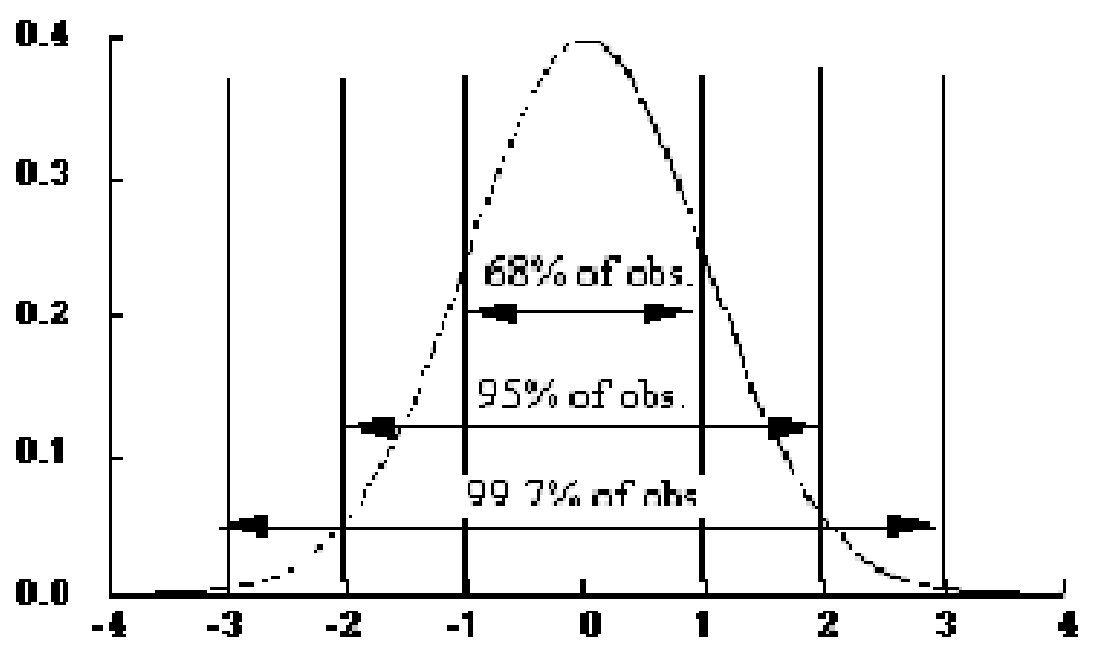
The History of Six Sigma

- Carl Frederick Gauss (1777-1855) introduced … the concept of the normal curve

- In the 1920's Shewhart showed that three sigma om ...the mean is the point where a process requires correction
- Many measurement standards (Cpk, Zero Defects, etc.) later came on the scene

- In the 1980s Motorola decided that measuring defects in **thousands of opportunities** didn't provide enough granularity
- They wanted to measure **defects per million opportunities**
- Motorola developed this new standard and created the methodology and associated cultural change

Normal Distribution Curve



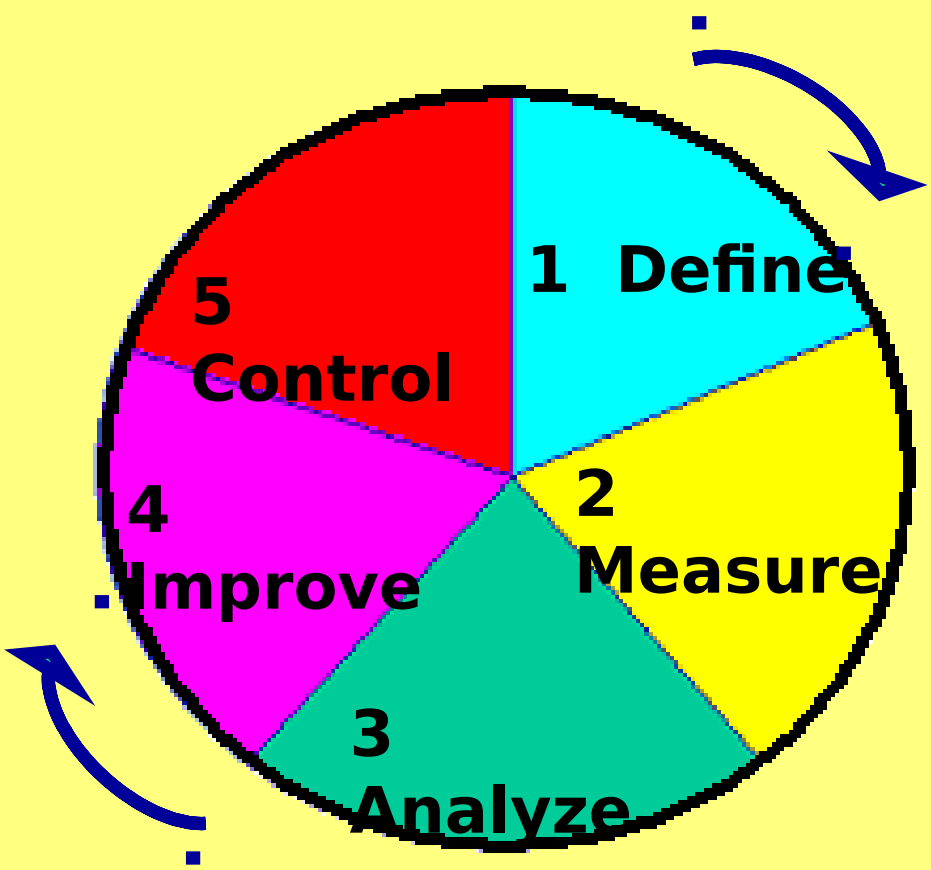
Distinctive Features of Six Sigma

- Increased focus on quality- as defined by customers
- More rigorous statistical methods
- Prioritization of resources to support key strategic initiatives

Basic Six Sigma Methodologies

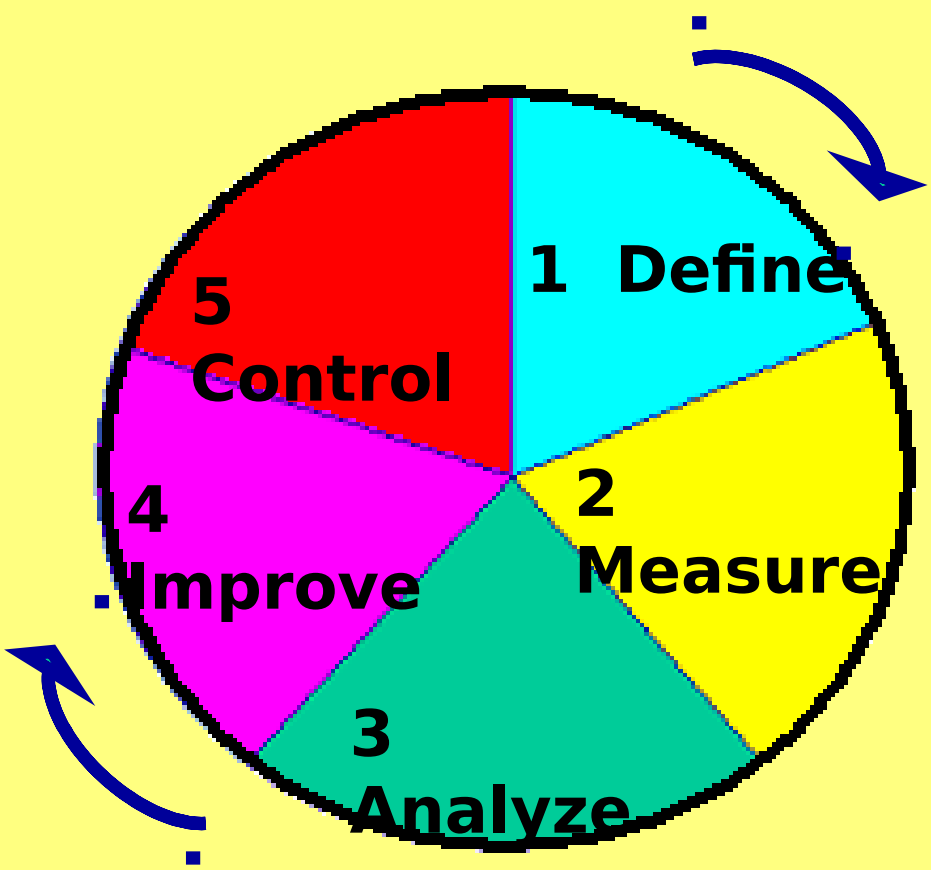
- **DMAIC**
  - Define
  - Measure
  - Analyze
  - Improve
  - Control
- **DMADV**
  - Define
  - Measure
  - Analyze
  - Design
  - Control

Five Steps of the DMAIC Method



1. Define the Project
   - Define the purpose and scope
   - Collect background info
2. Measure the Current Situation
   - Gather information on the current situation
3. Analyze to Identify Root Causes
   - Identify root causes
   - Confirm with data

Five Steps of the DMAIC Method



4. Improve
   - Develop, try out and implement solutions
   - Use data to evaluate results
5. Control
   - Maintain gains
   - Standardize work methods
   - Anticipate future improvements

Six Sigma Strategy

- A statistical measure of only 3.4 defects per million, it represents a management philosophy for improving productivity, eliminating mistakes, waste, and rework.

Kaizen

- Originally a Buddhist term, Kaizen comes from the words, "Renew the heart and make it good."
- Often translated as ongoing, continuous improvement
- Some attribute it for Japan's competitive success
- Kaizen seeks uninterrupted, ongoing incremental change.
- Adaptation of the Kaizen concept requires changes in "the heart of the business", i.e., corporate culture and structure

Kaizen

- Kaizen can be implemented by improving a process by a step by step approach
- Principles in Kaizen implementation are:
  - Human resources are the most important company asset
  - Processes must evolve by *gradual improvement* rather than radical changes
  - Improvement must be based on statistical/quantitative evaluation of process performance.

Hoshin Strategic Planning

- Hoshin Kanri was developed in Japan
- Based on U.S. techniques of Management by Objectives and the PDCA cycle
- Used to communicate company policy to everyone in the organization
- Primary benefit is to focus activity on the key things necessary for success.
- Japanese Deming Prize winners credit Hoshin as a key contributor to success

Hoshin (cont.)

- Progressive US companies, like Hewlett-Packard and Xerox, have adopted Hoshin as their strategic planning process
- Almost all Baldrige Award winners use some form of "Hoshin-like" planning process
- Hoshin is nothing more than a system of forms and rules that encourage employees to analyze situations, create plans for improvement, conduct performance checks, and take appropriate action.

Hoshin Planning:

1. Make the Current State of the Hospital or Department Visible

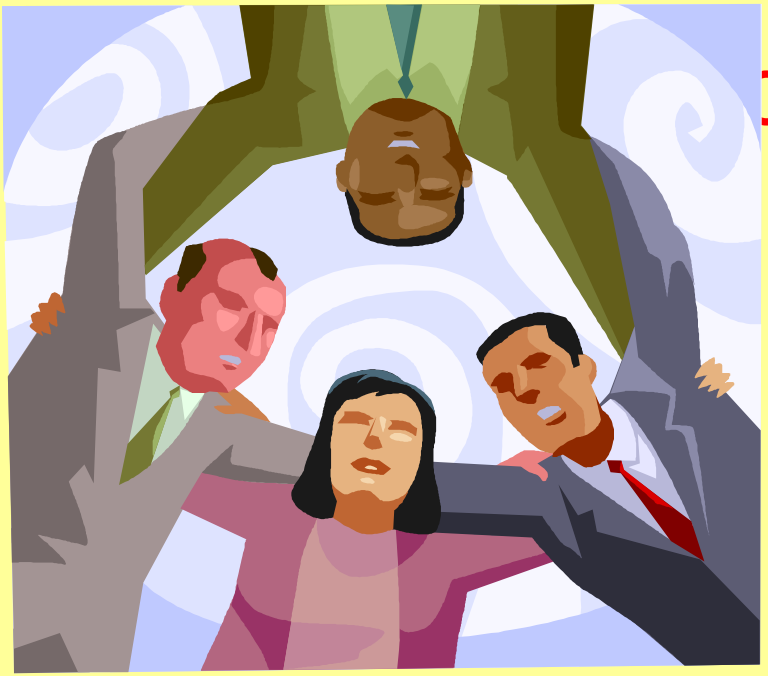
- S. W. O. T.
- JCAHO Self-assessment
- Baldrige Self-assessment
- Customer Satisfaction Surveys

Hoshin Planning:

2. Define the Vision of What the Organization or Department Will Be

Hoshin Planning:

3. Identify what the hospital or department needs to focus on to



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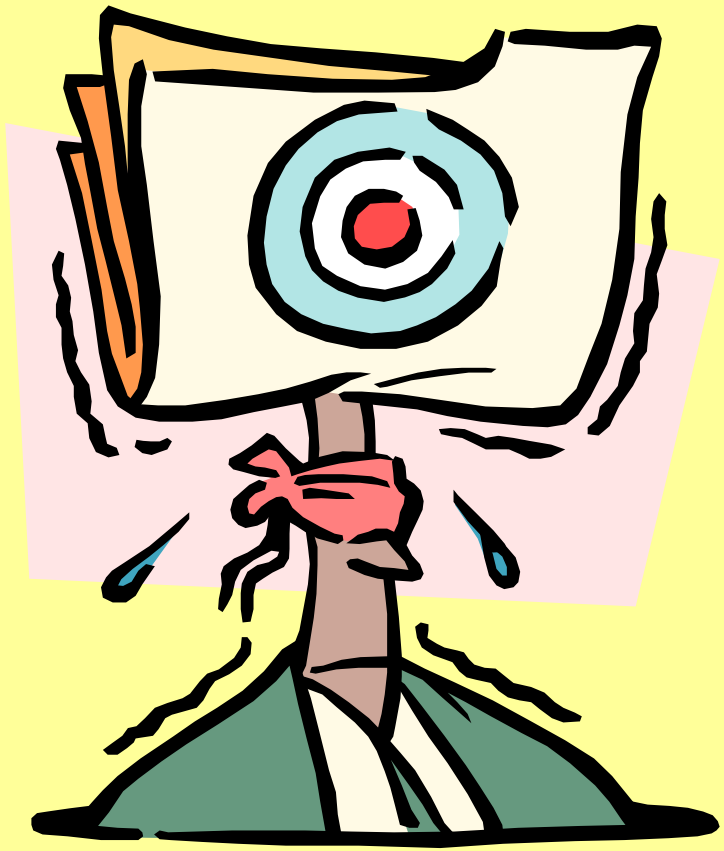
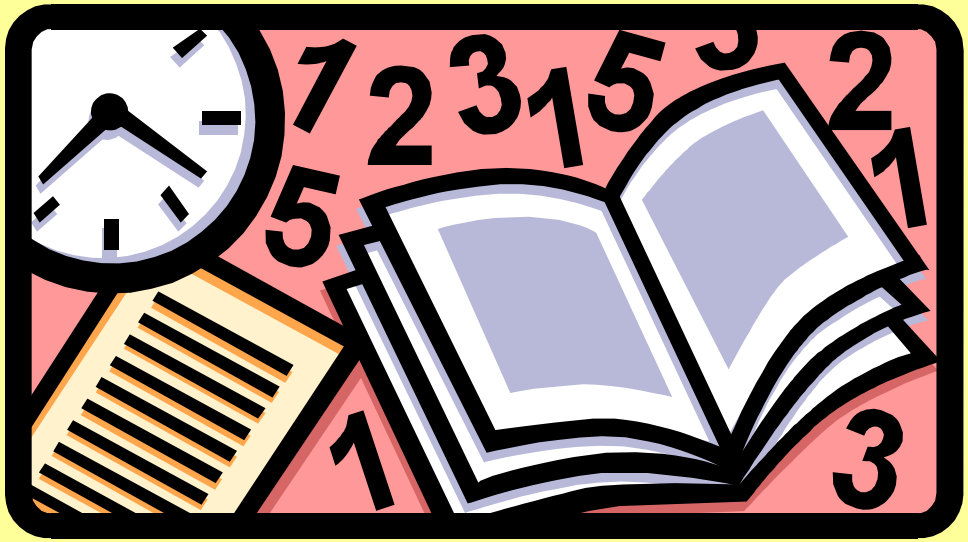
Hoshin Planning:

4. Develop Annual Targets



Hoshin Planning:

5. Develop Means



Hoshin Planning:

6. “Catchball”

Putting the Targets and Means Together

Hoshin Planning:

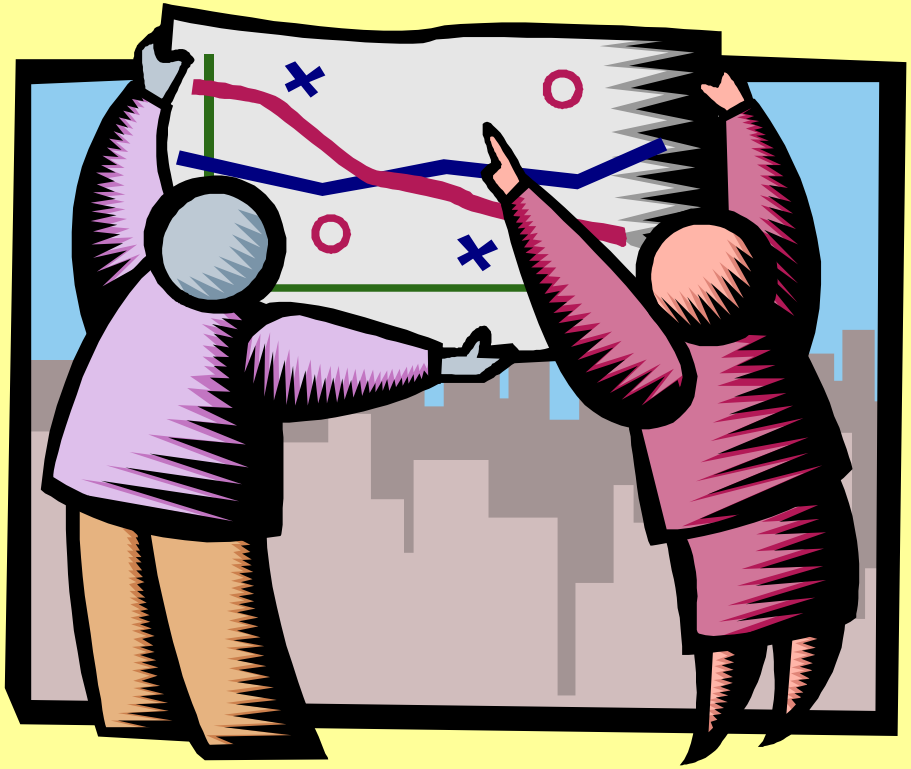
7. Finalize the Plan

Hoshin Planning:

8. Implement the Plan

Hoshin Planning:

9. Monitor Progress



Hoshin Planning:

10. Review the plan and

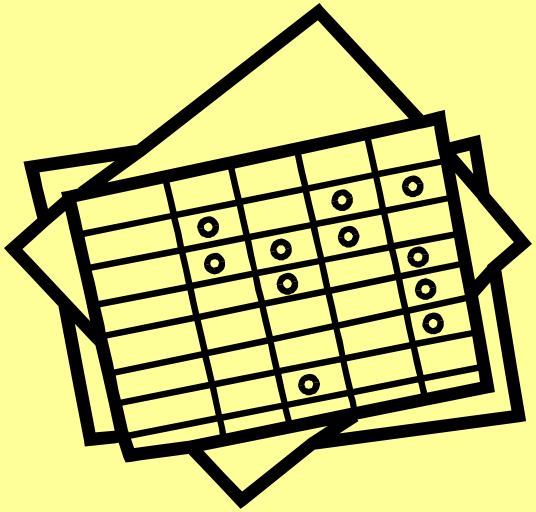
ts

Balanced Scorecard

- A management concept which helps managers at all levels monitor results by using key measurements to take the pulse of their organization
- A 1992 article by Kaplan and Norton, "The Balanced Scorecard - Measures that Drive Performance" in the Harvard Business Review, sparked interest in the method

Balanced Scorecard (cont.)

- Kaplan and Norton recommended broadening the scope of the measures to include four areas:
  - Financial performance
  - Customer knowledge
  - Internal business processes
  - Learning and growth



Balanced Scorecard (cont.)

- Allows the monitoring of present performance
- Capture of information about how well the organization is positioned to perform in the future.

Benefits of the Balanced Scorecard

- Focusing the whole organization on the key things to create breakthrough performance
- Helping to integrate various corporate programs, such as quality, re-engineering, and customer service initiatives
- Breaking down strategic measures to local levels so that unit managers, operators, and employees can see what's required at their level overall excellent performance

Similarities to Hoshin Planning

- Both seek breakthrough performance, alignment, and integrated targets for all levels
- The balanced scorecard suggests which specific areas should be measured for a balanced view
- The balanced scorecard method is more of a one-way street, without the emphasis on “catchball”*

*“Catchball” is the process of give and take between levels that helps to define strategy in Japanese companies; the executive team creates the strategy, and it cascades down

Performance Improvement Models

- Systems Thinking
- COOPIS
- FOCUS-PDCA

Systems Thinking

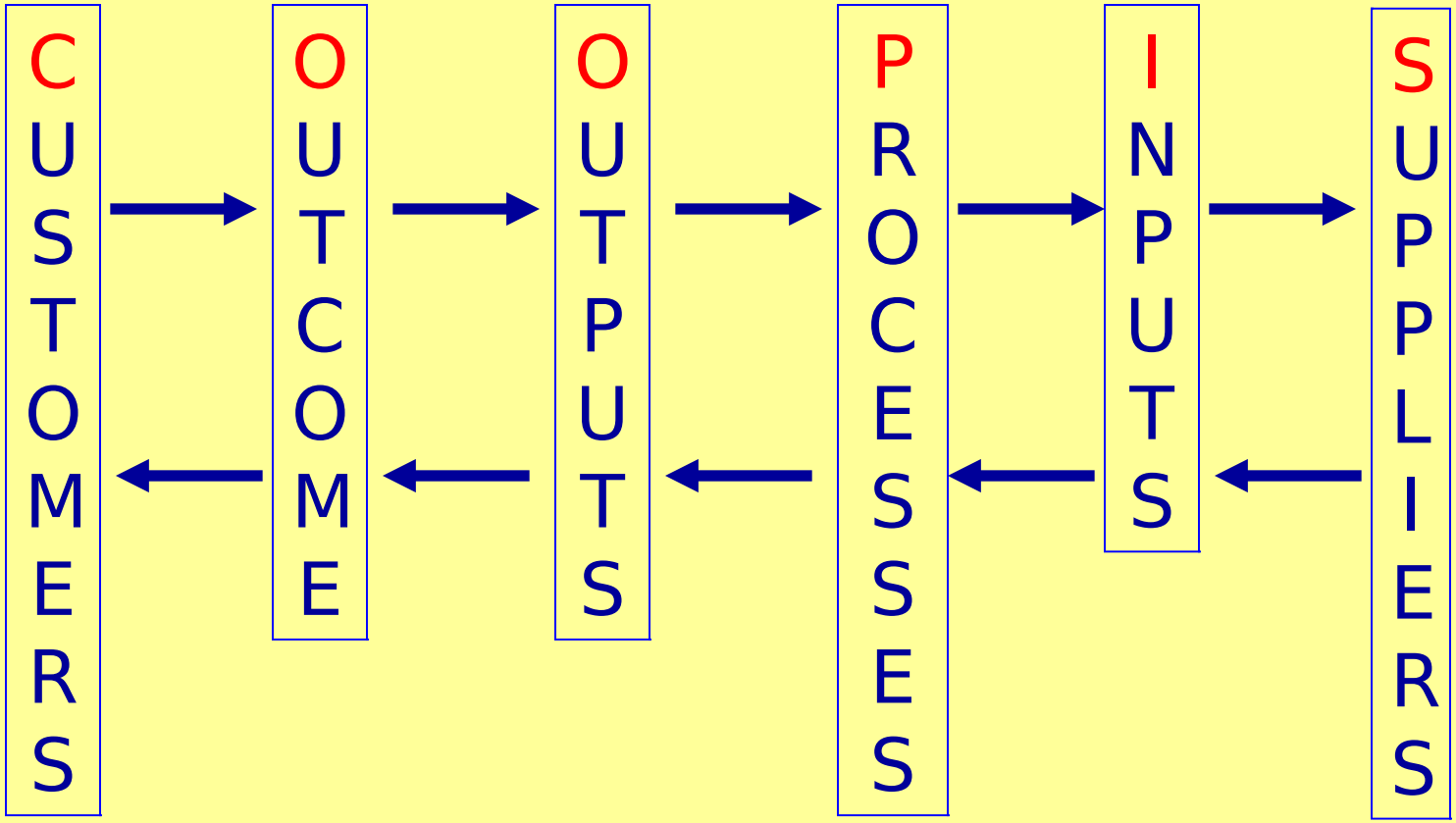
- Refers to thinking in terms of:
  - Interdependencies
  - Interactions
  - Sequences

Systems Thinking (cont.)

- Provides a conceptual framework to help see and understand relationships
- Helps to avoid simplistic solutions to complex problems
- Focus on interdependencies

COOPIS

Simple Approach to Systems Thinking



FOCUS-PDCA

- **Find** a process to improve
  - Define the process
  - Identify the customers
  - Decide who will benefit from improvement

FOCUS-PDCA

- **Organize** a team that knows the process
  - People knowledgeable about & involved in the process
  - Manageable team size
  - Membership representative of various levels of the organization
  - Develop method to document team process

FOCUS-PDCA (cont)

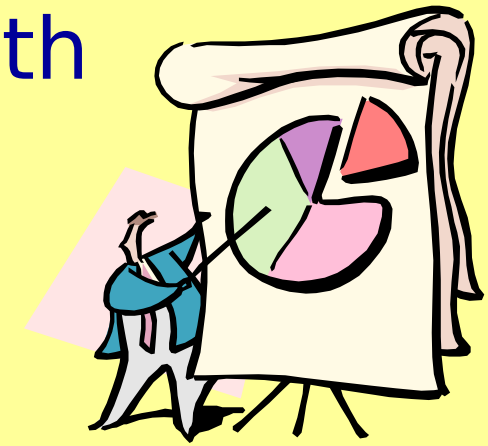
- **Clarify** current knowledge of the process
  - Gather and review current knowledge of the process
  - Analyze the process to distinguish between expected and actual performance

FOCUS-PDCA (cont)

- **Understand** sources of process variation
  - Plan and implement data collection
  - Measure the process, using performance indicators
  - Ascertain specific, measurable, and controllable variations
  - Learn the causes of variation

FOCUS-PDCA (cont)

- **Select** the process improvement
  - Identify the potential action to improve the process
  - Support the decision with documented evidence



FOCUS-PDCA (cont.)

- **Plan** the necessary action steps
- **Do** all that is necessary to implement the action plan and collect data to evaluate effectiveness
- **Check** the results of the action
- **Act** to fully implement the improvement or rework the PDCA Cycle as necessary to make further changes

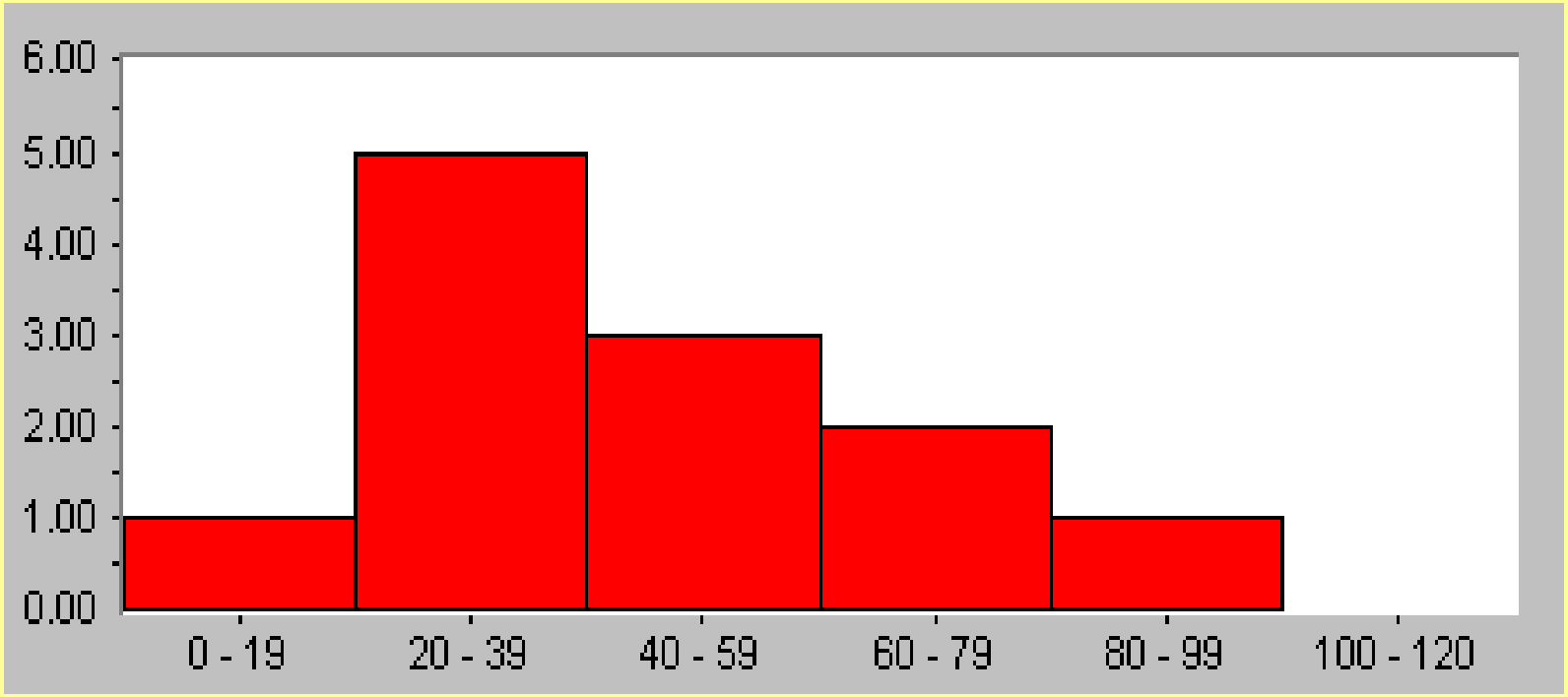
Performance Improvement Tools

- Statistical Process Control
- SWOT Analysis
- Self-assessments
- Customer Satisfaction Surveys
- Failure Modes and Effects Analysis
- Root Cause Analysis

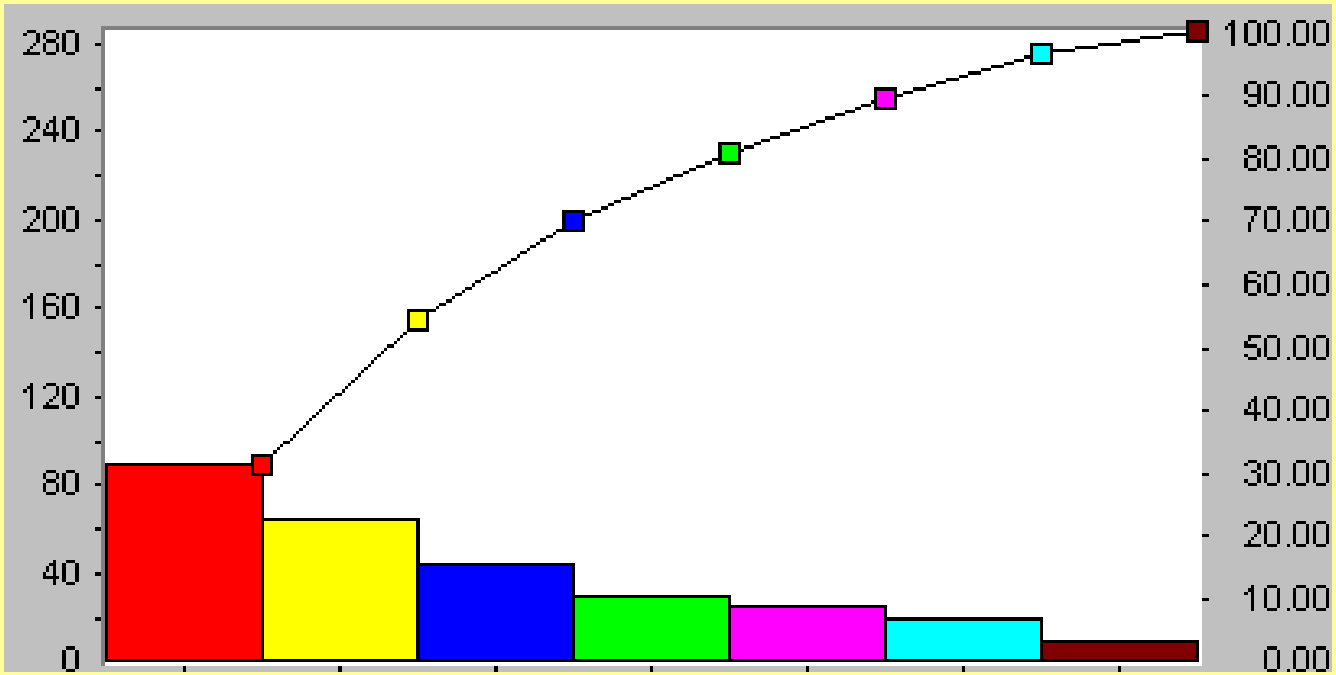
Data Tools

- Histogram
- Pareto Chart
- Run Chart
- Control Chart
- Scatter Plot
- Ishikawa (Cause & Effect) Diagram
- Relationship Diagram

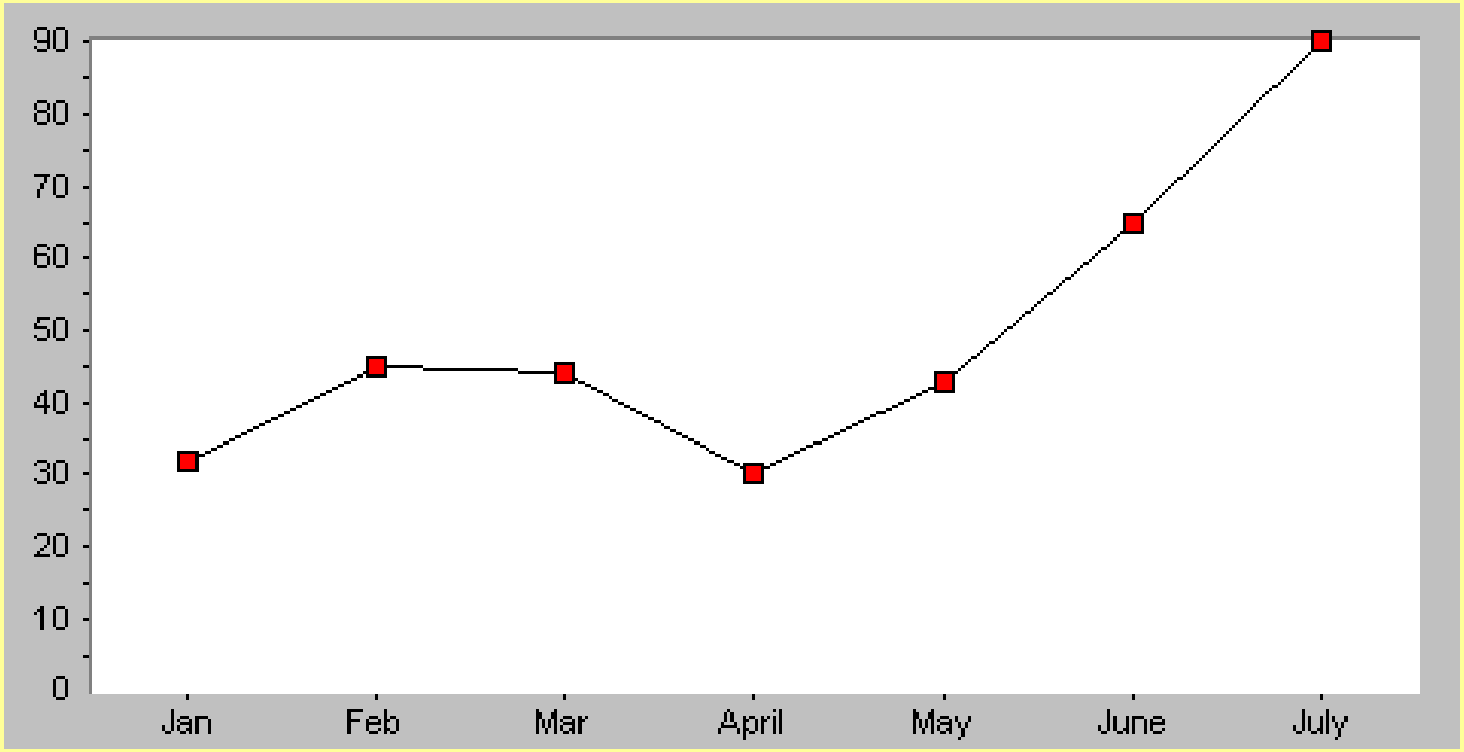
Histogram



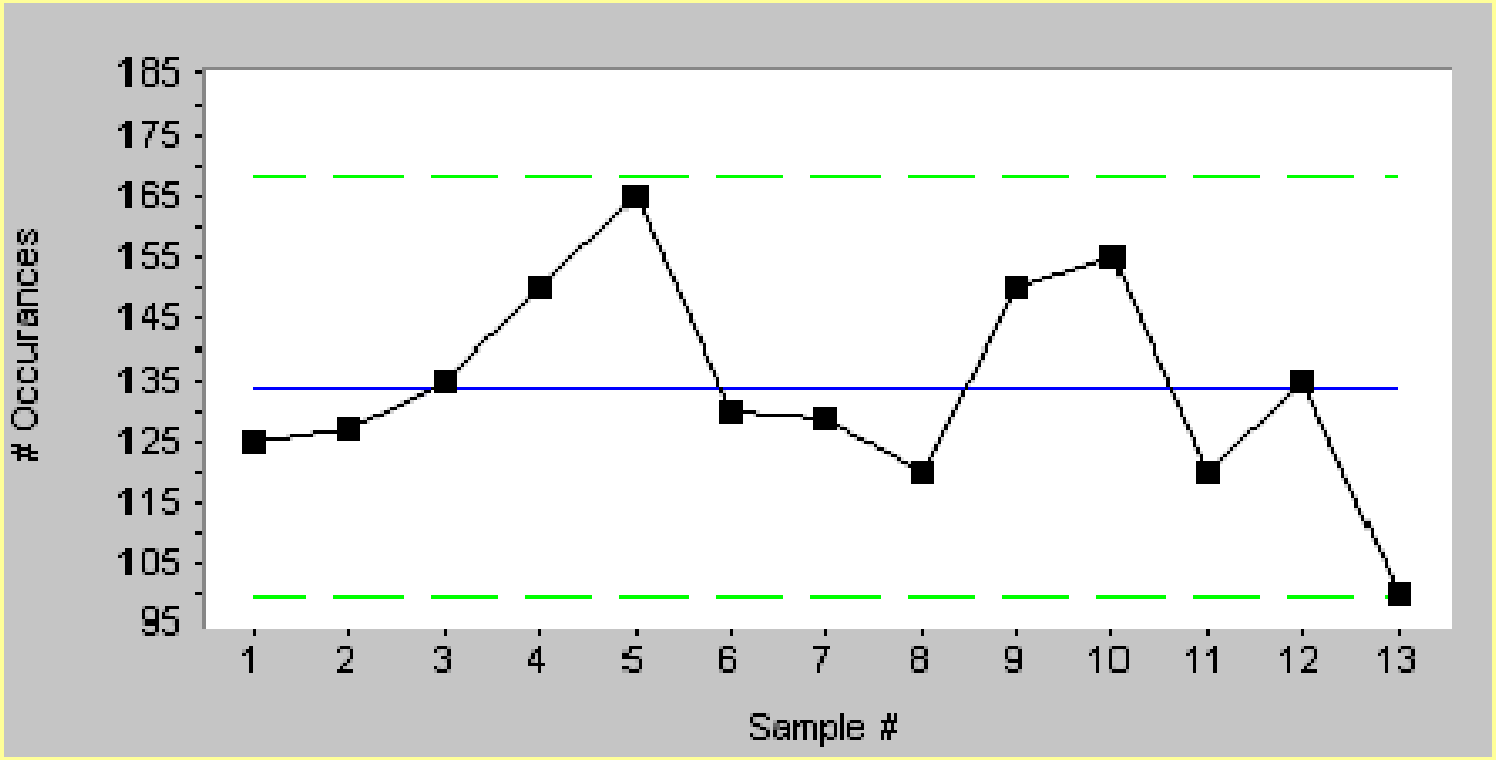
Pareto Chart



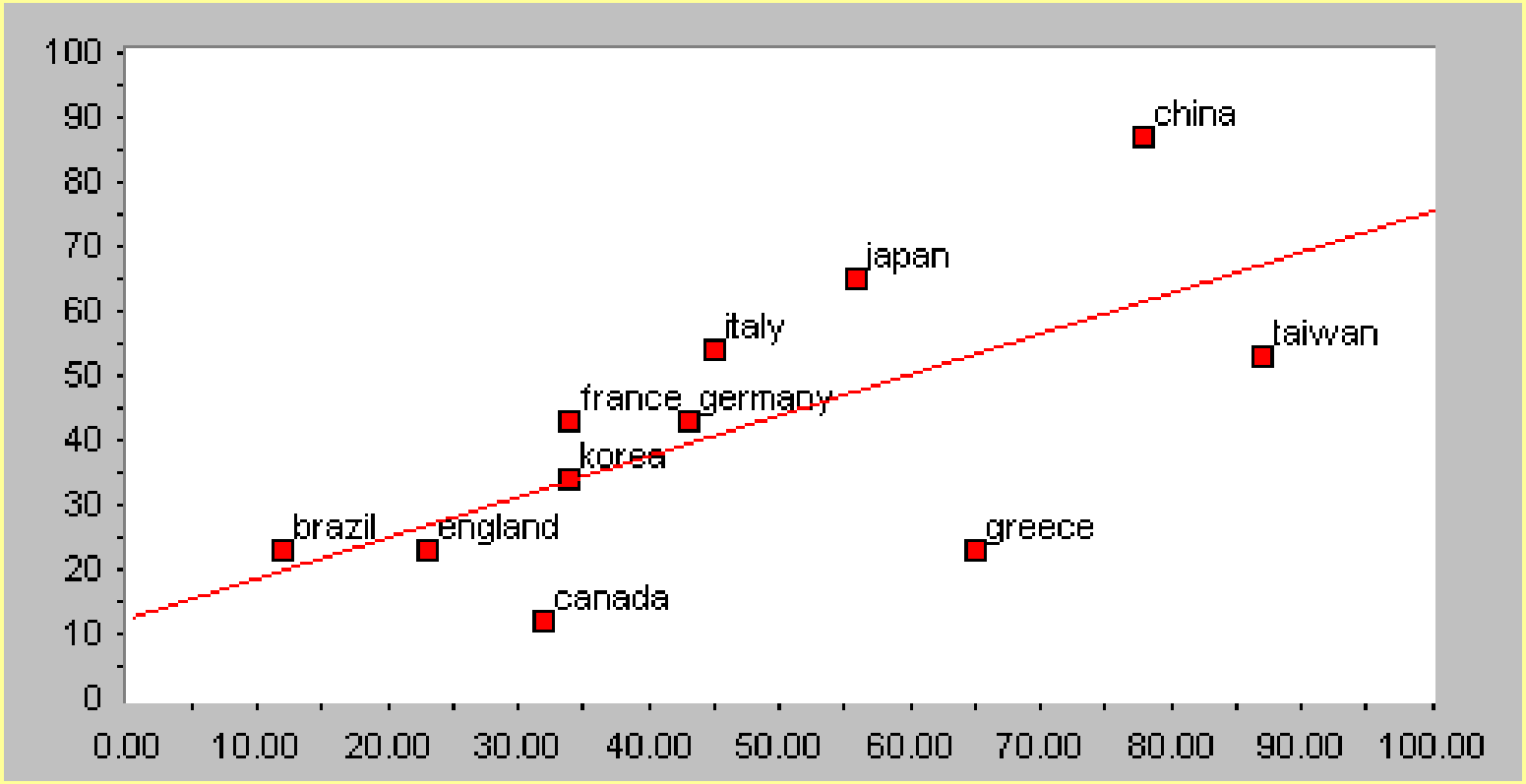
Run Chart

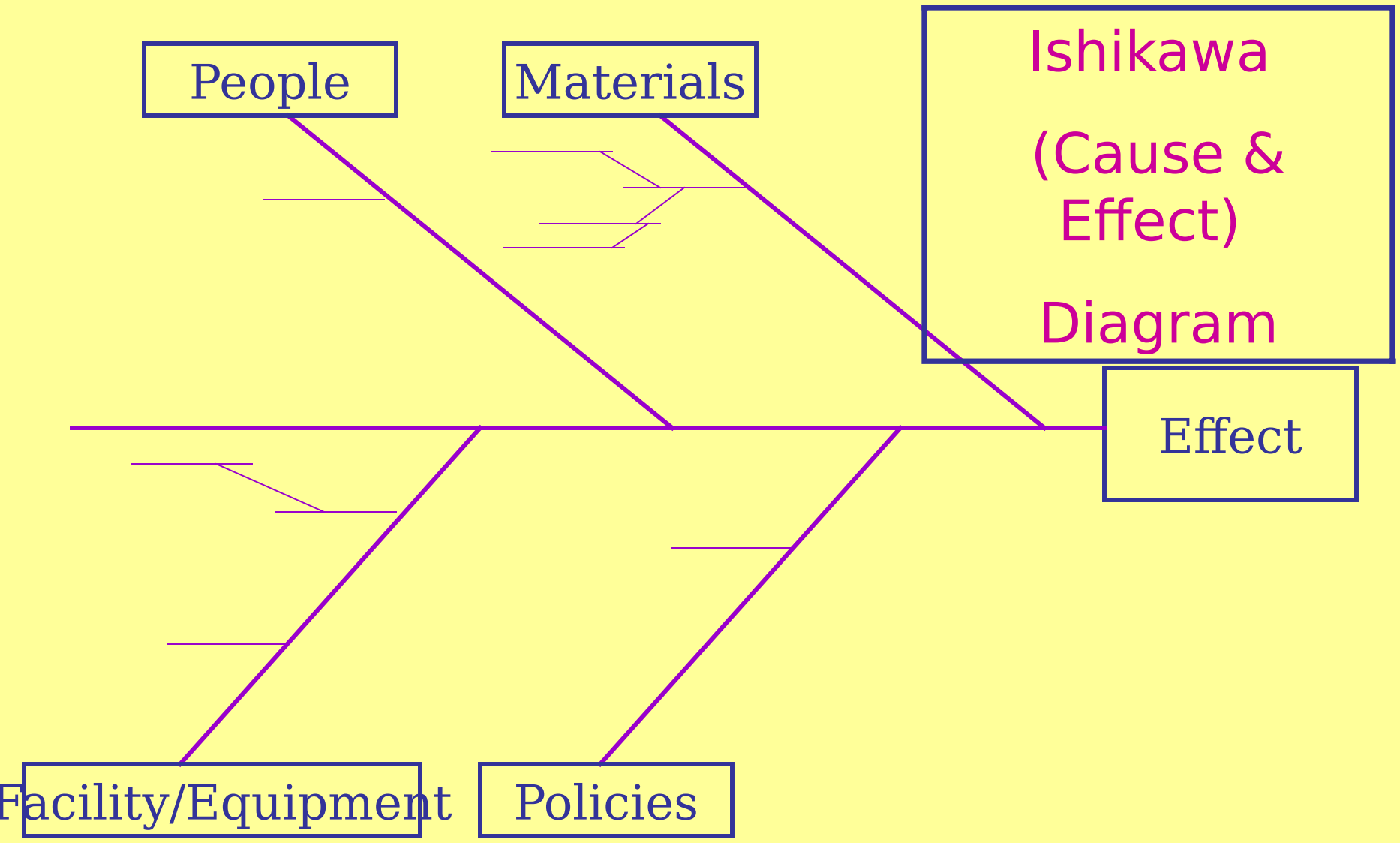


Control Chart

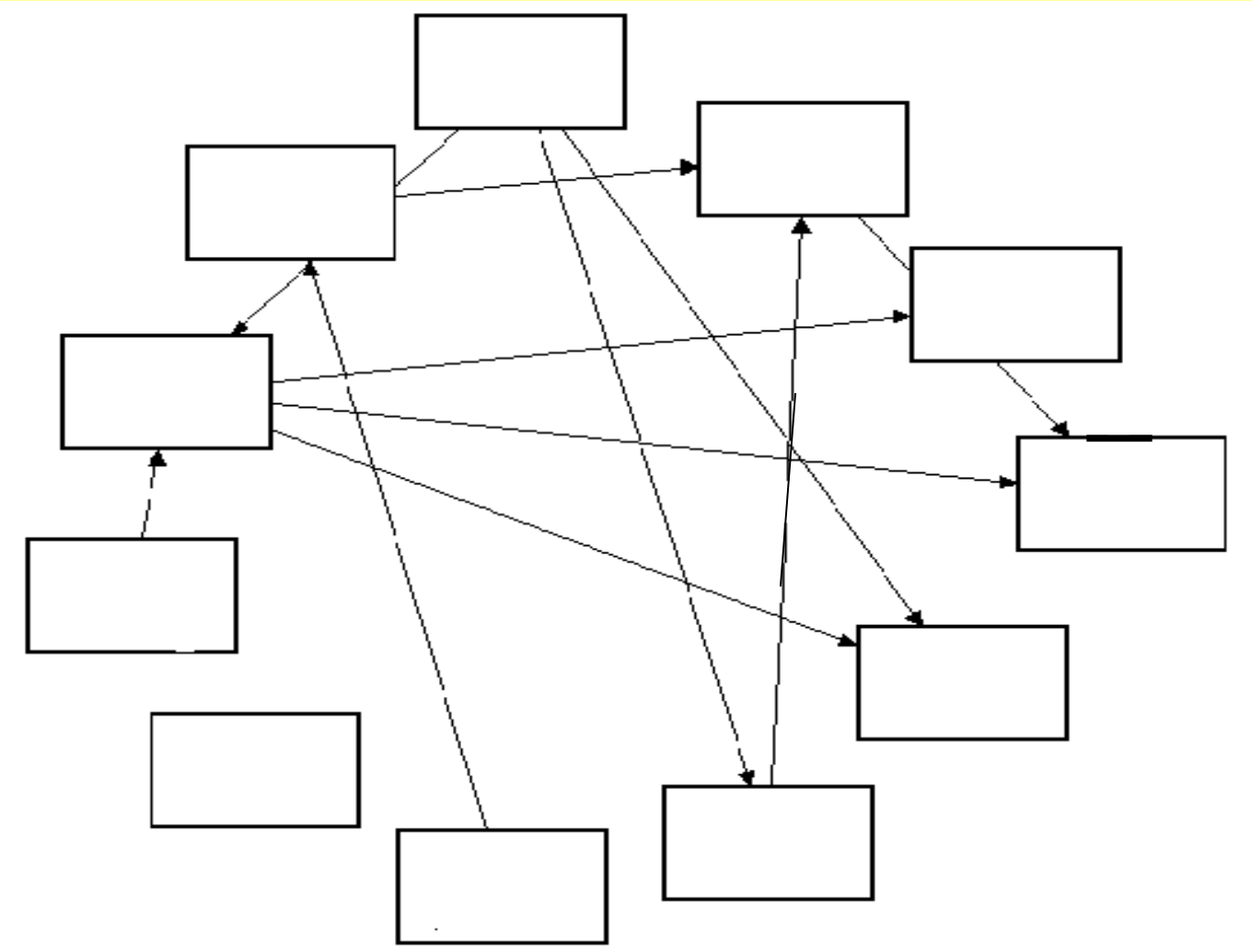


Scatter Plot




People
Materials
Ishikawa
(Cause & Effect)
Diagram
Effect
Facility/Equipment
Policies

Relationship Diagram



Failure Modes and Effects Analysis (FMEA)

- Critical part of an evidenced-based design process
- Methodology for anticipating, identifying, and analyzing potential reliability problems:
  - Early in the development cycle of a process, where it is easier to take actions to overcome these issues
  - Proactive assessment of an existing process to identify potential failure modes
- Identify actions to mitigate failures in a process or system

Steps in the FMEA Process

- Select a process, system or environmental unit to analyze
- Create a flowchart of the process, system, or unit
- Build a team to conduct the FMEA
- Identify potential failure modes

Steps in the FMEA Process (cont.)

- Evaluate failure modes and their causes
- Analyze the modes of the most critical failures
- Redesign the process, system, or unit, then implement the new design
- Assess the effectiveness of the plan
- Maintain effectiveness

Root Cause Analysis (RCA)

- A process for identifying the most basic or causal factor(s) underlying variation in performance
- The intensive, in-depth analysis of a problem event to learn the most basic reason(s) for the problem or a “near miss” (almost happened)
- Typically an retrospective review

Concept of RCA

- Primary focus is on *systems* and *processes*
- Progression is from *special cause* to *common cause* variation
- Approach: 5 “whys”
- Goal: Redesign for risk-reduction
- Action plan
- Measurement strategy

RCA Process

- Determining...
  - *What happened*
  - *How it happened*
  - *Why it happened*

RCA Process (cont)

- Define problem
- Collect initial data
  - Ask **what**, **when**, **where**, **how**, **who**
  - Begin a timeline/sequence of events
  - Review relevant documents

RCA Process (cont)

- Perform Analysis of the Task/Process
  - Break down a task or process into its steps
  - Establish performance baseline
  - Contrast baseline with what actually happened

RCA Process (cont)

- Perform Analysis of Differences
  - Compare the tasks/steps successfully performed to those performed unsuccessfully
  - Use the initial data input to establish steps in the actual occurrence
  - Analyze the difference(s) between what happened on other occasions and what happened when things went wrong
  - Discern the effect of each difference on the outcome

RCA Process (cont)

- Perform Control Barrier Analysis
  - Identify those barriers needed to prevent the event or unwanted action
  - Determine if they were missing, ineffective, or failed, and how they might have prevented the event
  - Examples:
    - Physical (e.g.,safety equipment
    - Administrative (e.g., policies)

RCA Process (cont)

- Begin Cause and Effect Analysis
  - Determine what causes allowed or forced each effect to occur
  - Identify each undesirable step/part of the occurrence
  - Show the relationship between each cause and effect
  - List all confirmed causes

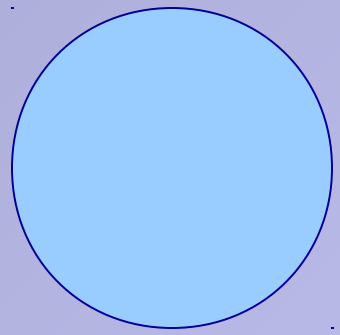
RCA Process (cont)

- Conduct Interviews
  - Find facts, not fault
- Determine Root Causes
  - 5 “Whys”
  - Draw conclusions
  - Validate conclusions with those closest to the process

RCA Process (cont)

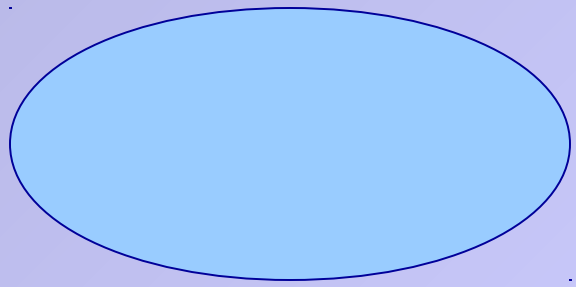
- Develop/recommend Changes Specific to the Root Causes
- Develop an Action Plan
- Report Conclusions

Incidents



Events

Conditions



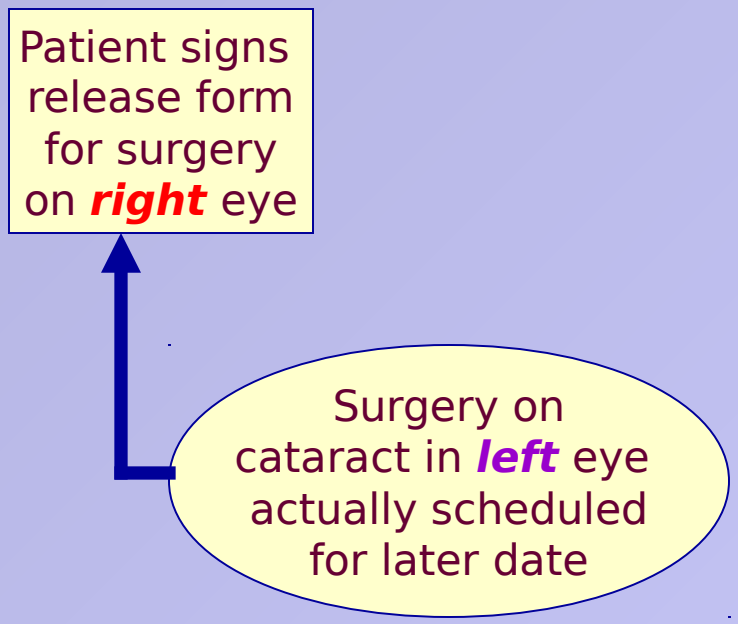
RCA Example:

Wrong Site Surgery

Patient signs release form for surgery on ***right*** eye

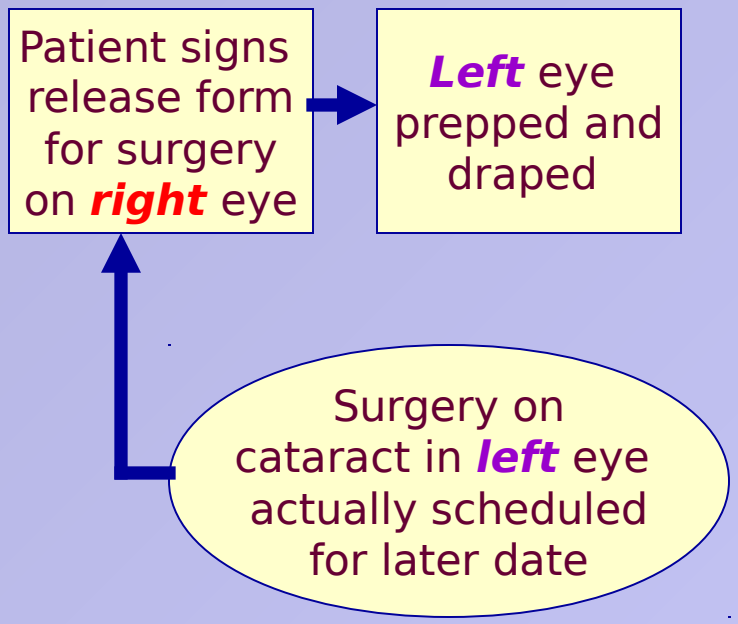
RCA Example:

Wrong Site Surgery



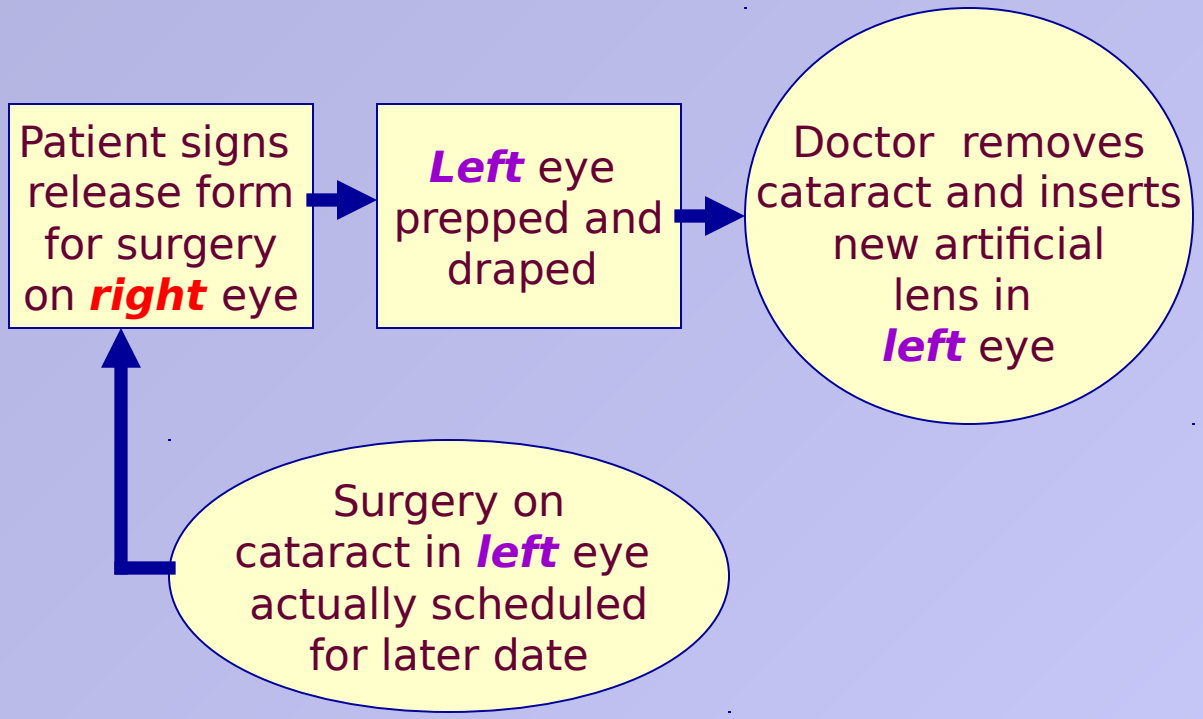
RCA Example:

Wrong Site Surgery


Patient signs release form for surgery on *right* eye
Left eye prepped and draped
Surgery on cataract in *left* eye actually scheduled for later date

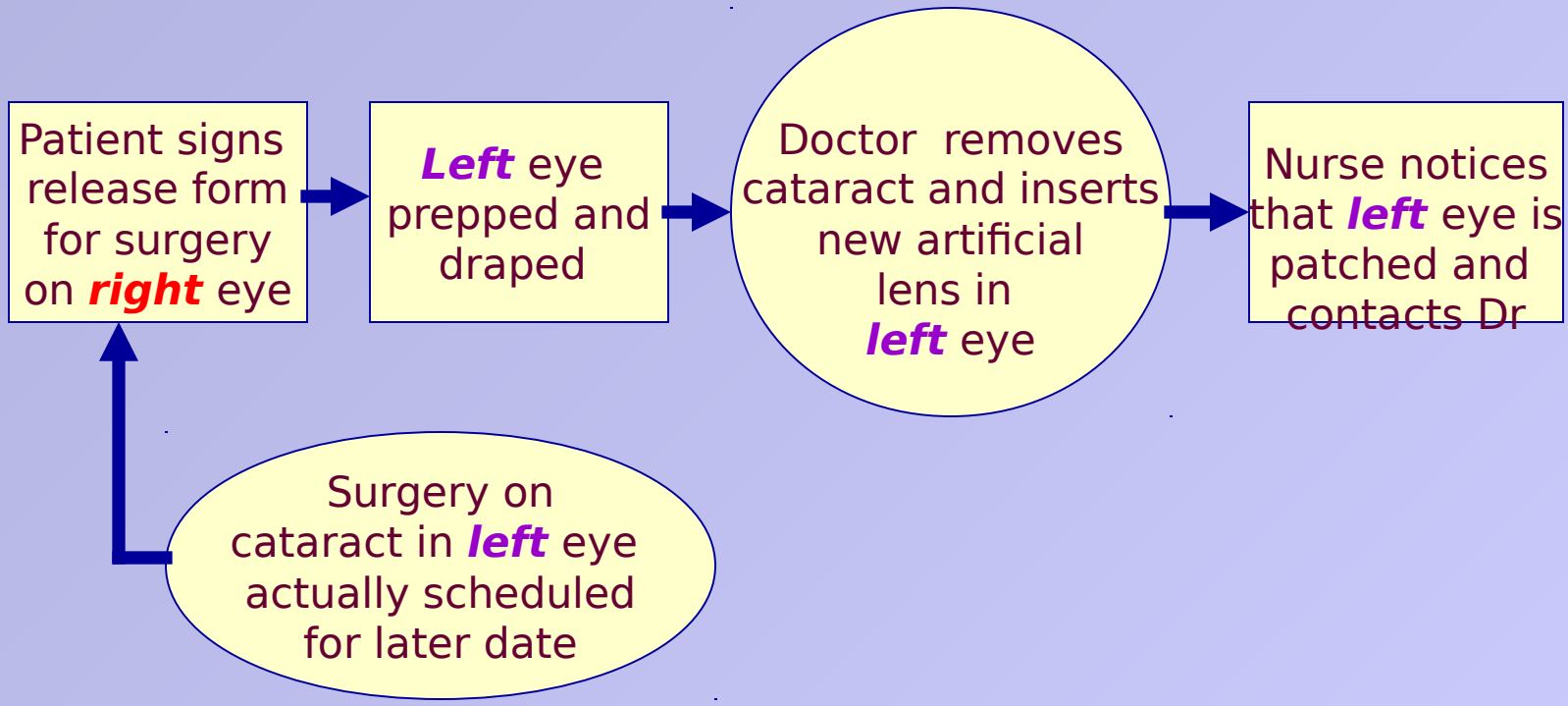
RCA Example:

Wrong Site Surgery


Patient signs release form for surgery on *right* eye
Left eye prepped and draped
Doctor removes cataract and inserts new artificial lens in *left* eye
Surgery on cataract in *left* eye actually scheduled for later date

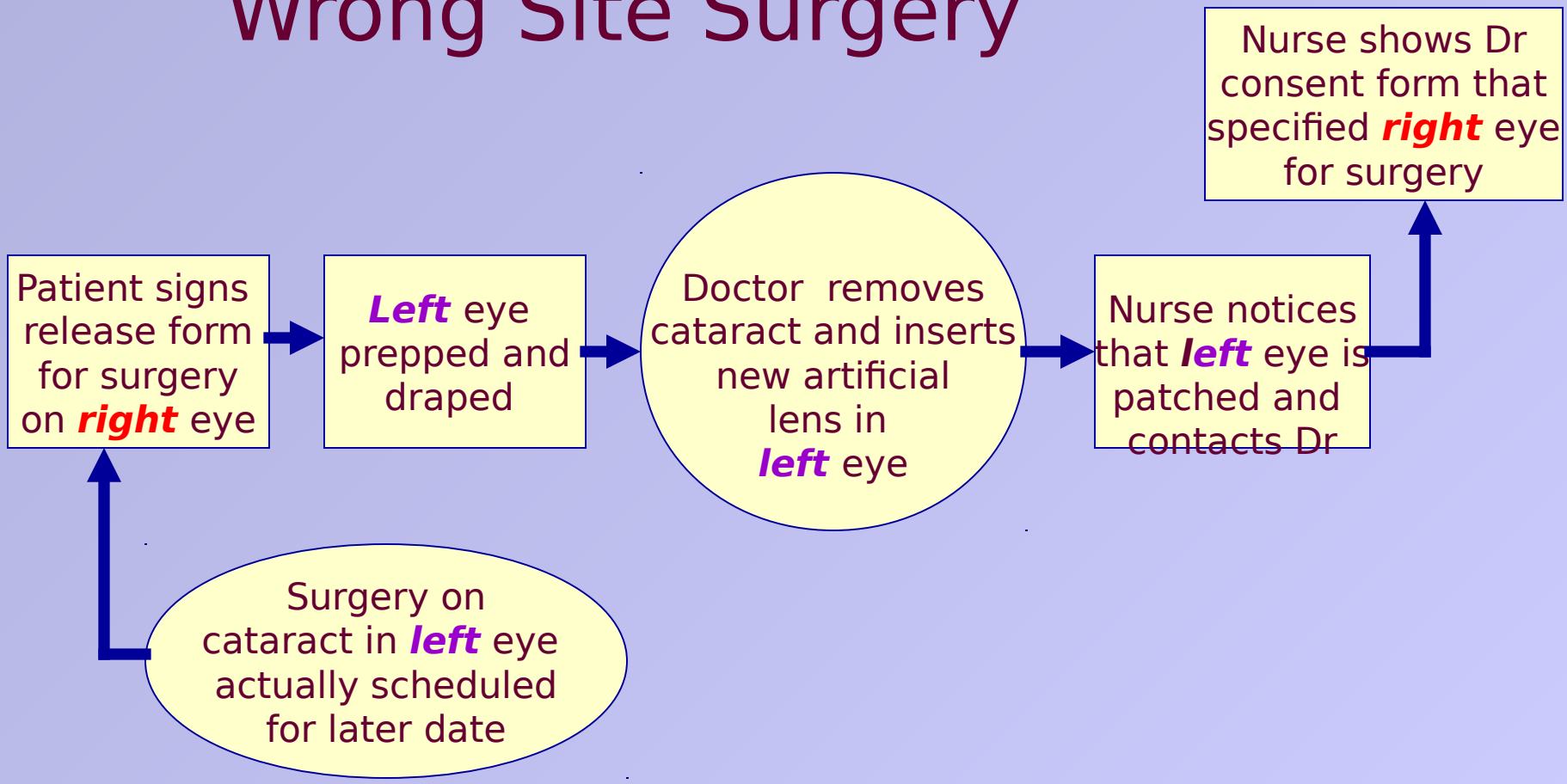
RCA Example:

Wrong Site Surgery


Patient signs release form for surgery on *right* eye
Left eye prepped and draped
Doctor removes cataract and inserts new artificial lens in *left* eye
Nurse notices that *left* eye is patched and contacts Dr
Surgery on cataract in *left* eye actually scheduled for later date

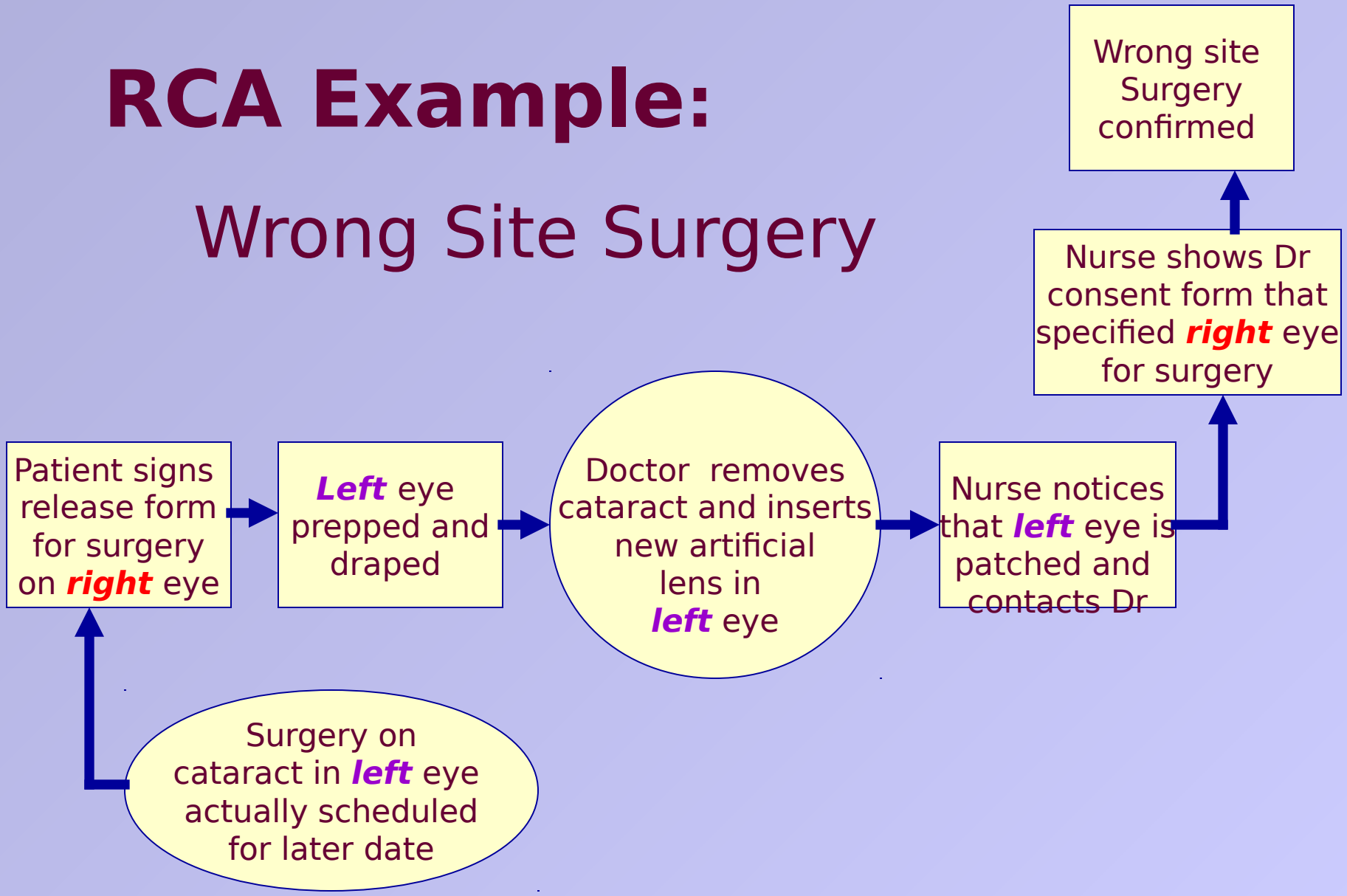
RCA Example:

Wrong Site Surgery


Patient signs release form for surgery on *right* eye
Left eye prepped and draped
Doctor removes cataract and inserts new artificial lens in *left* eye
Nurse notices that *left* eye is patched and contacts Dr
Nurse shows Dr consent form that specified *right* eye for surgery
Surgery on cataract in *left* eye actually scheduled for later date

RCA Example:

Wrong Site Surgery


Patient signs release form for surgery on *right* eye
Left eye prepped and draped
Doctor removes cataract and inserts new artificial lens in *left* eye
Nurse notices that *left* eye is patched and contacts Dr
Nurse shows Dr consent form that specified *right* eye for surgery
Wrong site Surgery confirmed
Surgery on cataract in *left* eye actually scheduled for later date

Strategic Planning

- Strategic Planning refers to the entire set of processes and behaviors that an organization uses to identify, prioritize, focus, and schedule action in order for it to remain viable in the future
- Most organizations do a great job of *planning*, but they fail when it comes to plan *execution*

Data Sources

- M2 Data Repository
  - SADR (Standard Ambulatory Data Record)
  - SIDR (Standard Inpatient Data Record)
  - PDTS (Pharmacy Data Transmission System)
  - DEERS Enrollment File
  - HCSR (Health Care Service Record)
- CHCS
- ORYX
- Core Measures
- Population Health Navigator
- PHOTO

Final Quote

"{We must move} from viewing performance improvement as something that is an episodic activity accomplished by a few individuals to a way of thinking and working for everyone in the organization -- truly a culture change."

VADM Richard Nelson, SITREP 2001

Acknowledgements

- Thanks to
  - CAPT Chuck Turner, DC, USN
  - Ken Morris, CPHQ

Questions?